



# TENALLOY 90D3

LOW ALLOY STEEL (High Temperature)

AWS A/SFA 5.5 **E9018-D3**

### CLASSIFICATION:

EN ISO 2560-A  
E 50 3 Z B 32 H5

### KEY FEATURES:

- Basic coated electrode
- Typical Mn-Mo type weld deposit
- Excellent fracture toughness down to -50°C
- Suitable for welding fully killed fine grained steel
- Suitable preheat, interpass and PWHT is required depending on base metal composition
- All position capability
- Radiographic quality welds

### APPROVALS: CE

### TYPICAL APPLICATIONS:

- Welding of low alloy high tensile steels of typical UTS 650 Mpa
- Welding of Q&T fine grained steels
- Penstocks, Earth moving equipments
- Suitable for low alloy structural steels

### TYPICAL CHEMICAL COMPOSITION OF UNDILUTED WELD METAL, Wt %:


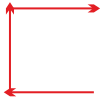
C	Mn	Si	Mo
0.09	1.65	0.80	0.45

### MECHANICAL PROPERTIES OF ALL WELD METAL:

	Condition	UTS, MPa	YS at 0.2% offset, MPa	EL%	CVN Impact at -50°C, J
Typical	PWHT: 620°C for 1 hr.	700	510	19	60
Specification		620 min	530 min	17 min	47 min

Diffusible H2 Content: <5 ml/100 gm

### PARAMETERS - PACKING DATA:

Ø x L, mm	Amperage, A		
3.15 x 450	100-140	 <b>AC (70 OCV)/DCEP</b>  <b>REDRYING CONDITION:</b> 250-300°C for minimum 1 hr.	All Positions, except vertical Down  
4.0 x 450	140-180		
5.0 x 450	190-250		

Available in Standard carton packing of 20 kg box containing 4 cartons of 5 kg each. Also available in vacuum packing